

*Montana.*—Fort Missoula, 11th, 13th.  
*Nebraska.*—Fort Niobrara, 11th, 21st; Clear Creek, 23d;  
 De Soto, 13th, 14th, 21st; Genoa, 22d, 23d; Red Willow, 20th.  
*Nevada.*—Fort McDermitt, 11th.  
*New Jersey.*—Somerville, 27th; Moorestown, 13th; Vine-  
 land, 24th.  
*New York.*—White Plains, 20th, 24th; Albany, 7th.  
*North Carolina.*—Highlands, 6th, 22d; Weldon, 22d; Bre-  
 vard, 6th, 22d; Wilmington, 24th.  
*Ohio.*—North Lewisburg, 28th; Wauseon, 13th.  
*Oregon.*—Albany, 13th; Roseburg, 11th, 13th.  
*Pennsylvania.*—Franklin, 23d; Erie, 28th.  
*Tennessee.*—Ashwood, 11th; Austin, 23d; Murfreesborough,  
 22d.  
*Texas.*—Fort Davis, 7th; Indianola, 28th.  
*Utah.*—Nephi, 9th, 23d.  
*Virginia.*—Wytheville, 1st.  
*Washington Territory.*—Fort Canby, 10th to 13th, 23d; Col-  
 fax, 4th, 8th, 9th; Spokane Falls, 11th, 13th, 22d.  
*Wisconsin.*—Embarras, 10th; Ripon, 10th; Sussex, 10th,  
 22d; Milwaukee, 10th.  
*Wyoming.*—Fort Bridger, 27th; Fort Supply, 27th.

In the following table are shown the greatest and least num-  
 bers of rainy (upon which rain fell) and cloudy days; the  
 greatest and least percentages of mean relative humidity; and  
 the highest and lowest dew-point means, as reported from the  
 various districts, for the month of April, 1883:

Districts.	Rainy days	Cloudy days.	Rel. humidity. *	Dew-point
			Percentages.	°
New England.....	From 10 to 15	From 5 to 12	From 57.8 to 81.1	From 28.5 to 36.9
Middle Atlantic states..	" 12 " 19	" 5 " 14	" 55.8 " 81.5	" 31.0 " 46.8
South Atlantic states....	" 10 " 16	" 5 " 17	" 65.8 " 85.0	" 47.2 " 66.0
Florida peninsula.....	" 2 " 13	" 0 " 8	" 70.6 " 70.8	" 62.7 " 68.1
Eastern Gulf.....	" 13 " 18	" 6 " 11	" 68.8 " 78.8	" 54.5 " 61.2
Western Gulf.....	" 7 " 16	" 5 " 18	" 61.6 " 78.3	" 40.0 " 63.4
Rio Grande valley.....	" 3 " 8	" 0 " 9	" 50.0 " 77.7	" 49.9 " 60.0
Ohio valley and Tenn....	" 12 " 17	" 8 " 12	" 60.5 " 74.4	" 36.8 " 50.1
Lower lakes.....	" 12 " 16	" 6 " 11	" 58.3 " 72.2	" 39.1 " 34.3
Upper lakes.....	" 8 " 16	" 5 " 11	" 53.8 " 74.9	" 25.3 " 33.2
Extreme northwest.....	" 6 " 9	" 3 " 9	" 65.9 " 77.8	" 26.8 " 31.1
Upper Mississippi valley	" 11 " 15	" 7 " 12	" 55.7 " 62.4	" 30.6 " 40.0
Missouri valley.....	" 10 " 13	" 4 " 11	" 54.1 " 67.4	" 33.0 " 37.5
Northern slope.....	" 8 " 16	" 2 " 15	" 55.3 " 74.1	" 23.3 " 34.6
Middle slope.....	" 0 " 14	" 1 " 13	" 44.3 " 57.4	" 22.4 " 37.5
Southern slope.....	" 2 " 6	" 2 " 5	" 38.1 " 55.7	" 28.3 " 43.2
Southern plateau.....	" 0 " 6	" 0 " 5	" 31.4 " 44.1	" 14.2 " 30.8
Middle plateau.....	" 10 " 14	" 4 " 12	" 50.7 " 54.7	" 22.3 " 29.5
Northern plateau.....	" 8 " 18	" 3 " 14	" 58.3 " 69.0	" 25.6 " 35.1
North Pacific.....	" 19 " 20	Sixteen	" 67.5 " 74.3	" 37.6 " 40.6
Middle Pacific.....	" 8 " 17	" 1 to 5	" 58.3 " 85.3	" 39.6 " 44.4
South Pacific.....	" 1 " 7	" 0 " 5	" 47.9 " 68.4	" 43.9 " 45.2
Mt. Washington, N. H....	Twelve	Five	90.3	17.3
Pike's Peak, Col.....	Nineteen	Six	85.7	8.4

\* Relative humidity corrected for altitude.

#### SNOW.

The dates on which snow is reported to have fallen in the  
 various districts are as follows:

*New England.*—1st, 5th to 8th, 11th, 12th, 13th, 19th, 20th,  
 22d to 30th.

*Middle Atlantic states.*—1st, 2d, 7th, 20th, 22d, 23d, 24th,  
 29th.

*Ohio valley.*—1st, 2d, 7th, 12th, 23d, 24th.

*Lower lakes.*—1st, 2d, 6th, 7th, 8th, 22d to 25th, 28th.

*Upper lakes.*—3d, 4th, 6th, 7th, 9th, 10th, 11th, 13th, 15th,  
 16th, 19th, 22d to 27th.

*Extreme northwest.*—1st to 4th, 13th, 14th, 15th, 18th, 21st,  
 22d, 30th.

*Upper Mississippi valley.*—1st, 2d, 3d, 5th, 6th, 7th, 10th, 12th,  
 22d, 23d, 24th.

*Missouri valley.*—1st, 2d, 3d, 5th, 6th, 9th, 10th, 14th, 22d,  
 23d, 24th.

*Northern slope.*—1st to 5th, 8th to 14th, 16th, 17th, 21st to  
 27th, 30th.

*Middle slope.*—4th, 5th, 7th, 13th, 14th, 21st to 24th, 26th,  
 27th.

*Southern plateau.*—4th, 6th, 13th, 14th, 20th, 21st, 23d,  
 24th.

*Middle plateau.*—1st to 26th, 29th, 30th

*Northern plateau.*—1st, 2d, 3d, 6th to 16th, 21st, 22d, 23d,  
 25th, 26th, 28th.

On the summit of Pike's Peak, Colorado, snow fell on the  
 4th, 5th, 6th, 9th, 11th to 14th, 18th, 20th to 23d, 27th to 30th.

Other stations reporting snow, which are not included in the  
 above named districts are:

Cape Mendocino, California, 12th, 13th. Sacramento, Cali-  
 fornia, 13th, 14th. Fort Klamath, Oregon, 12th.

Unusually heavy snow storms for the season, have occurred  
 as follows:

Saint Paul, Minnesota, 10th.—The severest snow storm of  
 the season began during the afternoon of this date. Street  
 railway travel was suspended on account of snow-drifts.

Minneapolis, Minnesota, 10th.—One of the severest snow  
 storms of the season occurred here on this date. Street car  
 travel was suspended for the first time this winter. The roof  
 of a large building fell in from the weight of snow, during the  
 afternoon.

Reports from Deadwood, Dakota, state that a severe snow  
 storm began at that place on the night of the 12th, blockading  
 the railroads and damaging the telegraph lines.

Omaha, Nebraska, 22d.—A snow storm began during the  
 early morning of the 21st, and continued all day, blockading  
 all the railroad tracks in the mountain region, although the  
 snow-plows were actively used. The east-bound overland  
 train, due to-day, arrived nine hours late.

Atchison, Kansas, 23d.—Trains between Denver, Colorado,  
 and this place, encountered snow-drifts five feet deep, and  
 were delayed ten hours.

Cheyenne, Wyoming, 21st.—Snow is drifted in places to  
 depths of ten feet, causing suspension of travel. Trains on the  
 Union Pacific railroad did not proceed west of Cheyenne, on  
 account of snow-drifts. This storm was the severest that has  
 been experienced in the territories since the notable storm of  
 March 7th and 8th in 1878. The telegraph wires were pros-  
 trated in all directions. The storm continued until 9.30 a. m.  
 of the 24th. Heavy losses in sheep and cattle are reported  
 from many ranches.

Salt Lake City, Utah, 23d.—A severe snow storm began on  
 the 22d. In the valleys the snow melted rapidly, but it formed  
 heavy drifts in the railroad cuttings in the mountains.

Denver, Colorado, 23d.—The snow storm in the mountains  
 continues with unabated severity. All trains are delayed.  
 All available snow-plows were used to prevent a serious  
 blockade.

#### LARGEST MONTHLY SNOWFALLS.

[Expressed in inches.]

The following are the largest monthly snowfalls reported  
 from the various states and territories during the month:

*California.*—Cisco, 35; Summit, 34; Tehachapi, 16; Emi-  
 grant Gap, 14; Alta, 10.5; Colfax, 4.

*Colorado.*—Pike's Peak, 16.8; Fort Garland, 6; Fort Lewis,  
 4.3.

*Connecticut.*—Bethel, 6; Southington, 4.

*Dakota.*—Alexandria, 11.3; Fort Meade, about 7; Morris-  
 ton, 4.5; Wicklow, 3.75.

*Illinois.*—Polo, 3; Riley, 3.

*Maine.*—Gardiner, 5.5; Dexter, 4.5; Cornish, 4.

*Massachusetts.*—Fall River, 8; Somerset, 4.4; Rowe, 4,

*Michigan.*—Northport, 5.3; Ionia, 5.25; Otisville, 3.5;  
 Swartz Creek, 3.5; Lansing, 3.25.

*Nebraska.*—Fort Niobrara, 9.

*New Hampshire.*—Mount Washington, about 35; Wood-  
 stock, about 9; Wolfborough, about 6; Grafton, 5.5; Belmont,  
 5.4; Antrim, 4.2; Ashland, 4; Lake Village, about 4; Weir's  
 Bridge, 3.

*Nevada.*—Otego, 22.25; Truckee, 21; Wells, 12; Toano,  
 11; Boca, 9; Tecoma, 6; Halleck, 3.

*New York.*—Friendship, 6.5.

*Pennsylvania.*—Grampian Hills, 9; Wellsborough, 3.6; Dy-  
 berry, 3.

*Utah.*—Nephi, 13.6; Salt Lake City, about 8.

**Vermont.**—Lunenburg, 10; Strafford, 8; Woodstock, 4.75; Newport, 4.5; Randolph, 4.  
**Wisconsin.**—Sussex, 3.  
**Wyoming.**—Cheyenne, about 20; Fort Bridger, 14.8,

**DEPTH OF UNMELTED SNOW ON GROUND AT END OF MONTH.**  
*[Expressed in inches.]*

**Colorado.**—Pike's Peak, 24.  
**Maine.**—Eastport, trace.  
**Massachusetts.**—Rowe, in drifts.  
**Minnesota.**—Saint Vincent, 0.2.  
**New Hampshire.**—Mount Washington, 25; Grafton, drifts in places.

**SLEET.**

**Colorado.**—Fort Garland, 6th, 7th, 20th, 24th, 26th, 29th.  
**Connecticut.**—New Haven, 22d.  
**Dakota.**—Bismarck, 6th; Fort Bennett, 4th; Fort Meade, 14th; Fort Sisseton, 14th, 22d; Morrilton, 1st; Yankton, 10th.  
**Illinois.**—Chicago, 6th.  
**Indiana.**—Indianapolis, 23d.  
**Iowa.**—Davenport, 6th, 7th; Des Moines, 23d.  
**Maine.**—Bangor, 27th.  
**Massachusetts.**—Fort Warren, 8th.  
**Michigan.**—Escanaba, 26th, 27th; Fort Brady, 11th; Grand Haven, 3d, 5th, 22d; Marquette, 17th, 19th.  
**Minnesota.**—Saint Paul, 10th, 22d.  
**Montana.**—Fort Shaw, 9th, 22d.  
**Nebraska.**—Clear Creek, 23d; North Platte, 5th; Omaha, 23d.  
**New Hampshire.**—Mount Washington, 5th, 6th, 11th, 19th.  
**New Jersey.**—Freehold, 23d, 24th.  
**New York.**—Fort Hamilton, 29th; New York City, 22d, 23d, 29th.  
**Ohio.**—Canal Dover, 23d; Toledo, 7th; Wauseon, 22d.  
**Pennsylvania.**—Blooming Grove, 22d; Chambersburg, 23d, 29th; Leetsdale, 22d.  
**Rhode Island.**—Block Island, 23d; Point Judith, 23d, 24th.  
**Virginia.**—Lynchburg, 1st; Marion, 24th; Variety Mills, 1st, 24th.  
**Wisconsin.**—La Crosse, 10th, 22d.

**SNOW FROM A CLOUDLESS SKY.**

Keokuk, Iowa, 2d.—Between 7 and 8 a. m. light snow fell, while the sky was perfectly clear.

**COTTON REGION REPORTS.**

The temperature and rainfall observations which were made from April to October, 1882, in the cotton districts, were resumed April 1, 1882. In determining the averages for the various districts, as given in table below, reports have been used from the same stations, as were published in the REVIEW for April, 1882.

*Meteorological Record of the Cotton Districts for the month of April, 1882.*

Districts.	Average rainfall in inches.	Temperature.		Extremes.	
		Mean of the maxima.	Mean of the minima.	Highest.	Lowest.
New Orleans.....	6.99	80.0	59.6	97	40
Savannah.....	5.65	80.5	58.0	94	33
Charleston.....	3.58	76.4	54.9	89	37
Atlanta.....	6.39	74.1	51.0	88	30
Wilmington.....	4.97	70.9	48.7	87	26
Memphis.....	6.93	74.9	52.7	90	28
Galveston.....	1.90	79.4	57.2	91	29
Vicksburg.....	7.92	76.9	55.6	89	39
Montgomery.....	8.73	78.2	53.7	91	28
Augusta.....	6.58	76.8	54.7	92	31
Little Rock.....	6.78	75.3	53.9	90	37.2
Mobile.....	7.80	80.9	57.1	91	36

**WINDS.**

The prevailing directions of the wind for the month of April, 1883, at the Signal Service stations are shown on chart iii., by arrows flying with the wind. It will be seen from this chart

that the prevailing winds have been, with but few exceptions, variable in all of the districts. On the immediate California coast, they were from the west, except northwest at Cape Mendocino; and in Texas they were generally from the south.

In the following table are given the stations reporting the largest and smallest total movements of the air in each of the various districts:

Districts.	Stations reporting largest.	Miles.	Stations reporting smallest.	Miles.
New England.....	Block Island, R. I.....	9,625	New London, Conn.....	4,330
Middle Atlantic states.....	Ocean City, Md.....	11,392	Lynchburg, Va.....	2,998
South Atlantic states.....	Hatteras, N. C.....	13,551	Atlanta, Ga.....	3,026
Florida peninsula.....	Punta Rasa.....	8,183	Sanford, Fla.....	4,904
East Gulf.....	Starkville, Miss.....	6,577	Montgomery, Ala.....	3,506
West Gulf.....	Indianola, Tex.....	11,722	San Antonio, Tex.....	4,117
Rio Grande valley.....	Brownsville, Tex.....	7,949	Engle Pass, Tex.....	4,328
Ohio valley.....	Louisville, Ky.....	6,289	Pittsburg, Pa.....	3,713
Tennessee.....	Nashville.....	4,957	Memphis, Tenn.....	4,717
Lower lakes.....	Toledo, Ohio.....	8,254	Oswego, N. Y.....	5,552
Upper lakes.....	Milwaukee, Wis.....	10,225	Marquette, Mich.....	5,664
Extreme northwest.....	Moorhead, Minn.....	8,791	Saint Vincent, Minn.....	5,338
Upper Mississippi valley.....	Keokuk, Iowa.....	8,313	Dubuque, Iowa.....	4,998
Missouri valley.....	Huron, Dak.....	8,343	Fort Bennett, Dak.....	5,720
Northern slope.....	North Platte, Neb.....	9,256	Billings, Mont.....	4,470
Middle slope.....	Fort Elliott, Tex.....	10,742	Denver, Colo.....	4,624
Southern slope.....	Fort Sill, Ind. T.....	10,327	Fort Davis, Tex.....	5,280
Southern plateau.....	Santa Fe, N. Mex.....	8,710	Tucson, Ariz.....	3,408
Middle plateau.....	Pioche, Nev.....	5,983	Salt Lake City, Utah.....	4,914
Northern plateau.....	Eagle Rock, Idaho.....	9,350	Lewiston, Idaho.....	2,440
North Pacific.....	Portland, Oreg.....	4,628	Roseburg, Oreg.....	3,202
Middle Pacific.....	Cape Mendocino, Cal.....	*10,677	Sacramento, Cal.....	5,933
South Pacific.....	San Diego, Cal.....	5,798	Visalia, Cal.....	3,150

\* Record for eighteen days only.

On the summit of Mount Washington, New Hampshire, the total movement of the air was 23,900 miles, or 10,900 miles less than the total movement of the preceding month.

On the summit of Pike's Peak, Colorado, the total movement for the last eight days of the month was 3,102, no record having been kept during the earlier part of the month.

**HIGH WINDS.**

With the exception of the following dates; viz.: 7th, 13th, 14th, 15th, 17th, 23d, 24th, 29th, maximum wind velocities of fifty miles per hour or more were daily recorded on the summit of Mount Washington, the highest velocity of the month, eighty-eight miles from the southeast, occurring on the 11th.

At Cape Mendocino, California, the following high velocities occurred: 70 se., 1st; 88 se., 2d; 51 nw., 4th; 62 se., 7th; 92 se., 14th; 100 se., 15th. During a violent hurricane on the latter date, the anemometer caps were blown away, the self-register showing a velocity of one hundred and twenty miles per hour for the five minutes previous to the time of the breaking of the instrument. Violent gales also occurred at this place on the 18th and 19th.

Other high winds occurred during April as follows:—Cedar Keys, Florida, 50 sw., 50 se., and 71 s., on the 12th, 22d, and 23d, respectively; Fort Verde, Arizona, 60 sw., 12th; Portsmouth, North Carolina, 60 ne., 24th; Hatteras, North Carolina, 58 sw., 23d; Duluth, Minnesota, 52 ne., and 58 ne., on the 21st, and 22d, respectively; Fort Maginnis, Montana, 56 nw., 21st; Fort Sill, Indian Territory, 56 se., 21st; Bismarck, Dakota, 56 e., 21st; Indianola, Texas, 56 nw., 28th; Yankton, Dakota, 55 nw., 14th; West Las Animas, Colorado, 54 nw., 22d; Saint Paul, Minnesota, 53 se., 13th; Fort Shaw, Montana, 52 sw., 8th; North Platte, Nebraska, 52 se., 20th; Cape Henry, Virginia, 50 nw., 16th.

**LOCAL STORMS.**

On Sunday, April 22d, while the centre of the storm shown as viii., on chart i., was central in eastern Kansas, very violent tornadoes occurred in the states of Iowa, Mississippi, Alabama, and Georgia. The destruction of property was very great; and in Mississippi and Georgia, there were from two to three hundred lives lost, and about one thousand persons injured.

The reports of storms of local character which have occurred during April, arranged by states, are as follows:

**Alabama.**—Talladega, Talladega county, 23d: the heavy storm of last night did considerable damage in this community.